What is claimed is:

1. A product to tailor energy deposition, the product comprising:

a magnetic field,

the magnetic field being in a pre-set tailoring relationship with a body, a target volume in the body, and a electron-photon cascade in the body produced by a photon beam, where the photon beam and the electron-photon cascade are substantially parallel to a beam path,

the magnetic field having a component non-parallel to the beam path in the target volume, which is at least one hundred gauss;

the target volume having a target density;

the body having a body density proximal the target volume; and

the tailoring relationship causing a desired distribution of energy deposited in the body and the target volume.

2. The product of claim **1** wherein:

the target density is at least thirty percent greater than the body density; and

the preset tailoring relationship comprises a component of the magnetic field in the body proximal the target volume, non-parallel to the beam path of at least one hundred gauss.

3. The product of claim **2** wherein the magnetic field is produced by a magnetic field source inserted in a cavity in the body.

4. The product of claim **3** wherein the inserted magnetic field source is chosen from a plurality of graded magnetic field sources in order to match the cavity and the tailoring relationship.

5. The product of claim **1** wherein the tailoring relationship comprises:

an inserted volume,

the inserted volume differing in density by at least twenty percent from the body density, and

the magnetic field having a component in the inserted volume, non-parallel to the beam path of at least one hundred gauss.

6. The product of claim 1 wherein there is a magnetic field gradient non-parallel to the beam path, and wherein the tailoring relationship comprises:

sizing a first exposure of the photon beam so that it irradiates a first slice of the target volume parallel to the photon beam; and

sizing a second exposure of the photon beam so that it irradiates a second slice of the target volume parallel to the photon beam, the magnetic field having been changed to be substantially the same in the second slice during the second exposure as in the first slice during the first exposure.

7. The product of claim 6 wherein the magnetic field is changed for the second exposure by moving a magnetic field source.

8. The product of claim 6 wherein the tailoring relationship comprises a photon beam energy gradient non-parallel to the photon beam which matches the magnetic field gradient so that substantially the same energy is deposited in a first slice of the target volume parallel to the photon beam as in a second slice of the target volume parallel to the photon beam.

9. The product of claim 1 wherein the magnetic field is provided by a magnetic field source chosen from a plurality of magnetic field sources wherein:

a first magnetic field source chosen from the plurality of magnetic field sources has a first magnetic field configuration; and

a second magnetic field source from the plurality of magnetic field sources has a second magnetic field configuration which is different from the first magnetic field configuration.

10. The product of claim 9 wherein at least one magnetic field source from the plurality of magnetic field sources is a superconducting magnet.

11. The product of claim 9 wherein at least one magnetic field source from the plurality of magnetic field sources has power and cooling needs attached via a flexible conduit.

12. The product of claim 9 wherein at least one magnetic field source from the plurality of magnetic field sources comprises a configuration of several electromagnets.

13. The product of claim 9 wherein at least one magnetic field source from the plurality of magnetic field sources has a face which is warmed only temporarily for use.

14. A method of tailoring energy deposition, the method comprising:

providing a target volume having a target density;

providing a body having a body density proximal the target volume, wherein the target volume is in the body;

providing a magnetic field;

tailoring the magnetic field in a relationship with the body, the target volume, and a electron-photon cascade in the body produced by a photon beam, where the photon beam and the electron-photon cascade are substantially parallel to a beam path, wherein the magnetic field has a component non-parallel to the beam path in the target volume, which is at least one hundred gauss; and

the tailoring relationship causing a desired distribution of energy deposited in the body and the target volume.

15. The method of claim 14 wherein the magnetic field has a component orthogonal to the beam path in the target volume.

16. The method of claim 14 further comprising inserting a magnetic field source inserted in a cavity in the body to produce the magnetic field.

17. The method of claim 16 further comprising choosing the magnetic field source from a plurality of graded magnetic field sources in order to match the cavity and the tailoring relationship.

18. The method of claim 14 further comprising inserting a volume in the body, the volume differing in density by at least twenty percent from the body density, wherein the magnetic field has a component in the inserted volume, non-parallel to the beam path of at least one hundred gauss.

19. The method of claim 14 further comprising:

providing a magnetic field gradient non-parallel to the beam path, and wherein tailoring the magnetic field comprises:

sizing a first exposure of the photon beam so that it irradiates a first slice of the target volume parallel to the photon beam; and

sizing a second exposure of the photon beam so that it irradiates a second slice of the target volume parallel to the photon beam, the magnetic field having been changed to be substantially the same in the second slice during the second exposure as in the first slice during the first exposure.

20. The method of claim **19** wherein tailoring the magnetic field comprises matching a photon beam energy gradient non-parallel to the photon beam to the magnetic field gradient so that substantially the same energy is deposited in a first slice of the target volume parallel to the photon beam as in a second slice of the target volume parallel to the photon beam.